

US EPA ARCHIVE DOCUMENT

NAAQS Implementation Technical Tools

J. David Mobley

EPA's Office of Air Quality Planning and Standards
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Technical Tools Being Developed

- Source Monitoring
- Emission Factors
- Emission Inventory
- Air Quality Modeling
- Ambient Monitoring
- Data Analysis

Source Monitoring

- Source measurement methods for PM fine and its precursors to be issued
 - ▲ Primary
 - ▲ Secondary
 - ▲ Fugitive
 - ▲ NH₃

PM2.5 Emission Factor Program

- Initially emphasize the following:
 - ▲ Agricultural burning (crop residue)
 - ▲ Ammonia (all sources)
 - ▲ Commercial/institutional combustion
 - ▲ Construction debris and land clearing debris
 - ▲ Fugitive Dust
 - ▲ Mobile Sources (Highway and Non Road)
 - ▲ Portland cement and lime manufacturing
 - ▲ Primary and secondary metals and foundries
 - ▲ Residential combustion (wood, oil, waste)
 - ▲ Utilities and industrial combustion (coal, oil, gas)
 - ▲ Wildland burning
 - ▲ Wood products industry
- Updates to AP-42, FIRE and Speciate each fall

Emission Inventory

- Major topics covered by the guidance
 - ▲ Relationship of the guidance to the Emission Reporting Rule
 - ▲ Submittal dates
 - Ozone
 - ▶ 1996 Preliminary Analysis
 - ▶ 1999 SIP Planning
 - Particulate Matter
 - ▶ 1999 Preliminary Analysis
 - ▶ 2002 SIP Planning
 - Regional Haze
 - ▶ 1999 SIP Planning
 - ▲ Relationship to National Emission Trends (NET) Emission Inventory

Consolidated Emission Reporting Rule

- Rule consolidates all emission reporting requirements into single location
- Reporting requirements for toxics and PM_{2.5} are added
- Reporting will now be Statewide for both area and point sources
- States given flexibility to spread out workload
- States have choices on how to report data to EPA.

Air Quality Modeling

■ MODELS 3

- ▲ Developing guidance for regulatory application
- ▲ Preparing training and outreach plan
- ▲ Applications
 - O3 - *initial*
 - PM2.5 and Haze - *next*
 - Toxics - *later*
- ▲ REMSAD
 - Available for PM2.5 and Haze analyses
- ▲ CMB8
 - Receptor modeling technique being developed for PM2.5 applications
- ▲ Observation-Based Models
 - Tools being investigated to support analyses with photochemical models to provide info on effectiveness of NOX vs VOC controls

Ambient Monitoring

■ Ozone

- ▲ Guidance issued for 8-hour standard
- ▲ PAMS maintained

■ PM2.5

- ▲ PM2.5 Federal Reference Method Samplers designated
- ▲ PM2.5 monitors being deployed by 12/31/98
- ▲ Speciation monitors being evaluated
- ▲ Continuous monitors to be deployed in 1999
- ▲ Specialized monitoring (supersites) being proposed
- ▲ Coordination with NAS, State/locals ongoing

■ Haze

- ▲ Visibility and PM2.5 Networks being integrated with IMPROVE sites

Elements

- Core sites (all FRMS) ~ 850 minimally required
- Spatial Averaging/SPMs (FRMs and non-FRMS) ~ 200
- IMPROVE ~ 100
- Chemical Speciation ~300 (50 required to be collocated with FRMS + 250 additional sites)
- Continuous - ~ 50 required to be collocated at FRM sites + ~ 50 additional sites
- Supersites - ~ 7 locations

Data Analysis

- Revised Pollutant Standard Index for Ozone and PM_{2.5} being tested and developed
- PM Fine and Ozone data analysis guidelines being developed

Summary

OAQPS is striving to produce and provide source monitoring, emission factor, emission inventory, ambient monitoring, modeling and data analysis tools to support implementation of the NAAQS by December 1998 with enhancements thereafter.